

## CLAIMS

Having thus described the aforementioned invention, we claim:



1. An arch support orthosis having an arch curve being adjustably tensioned during use, said arch support brace being fittable proximately under a foot and being sized and shaped to be removably placed within a foot support enclosure worn by a user, comprising:
  1. an arch support orthosis being sized for support of the foot from underneath about the metatarsal bones of the foot, to underneath about the calcaneus bone of the foot, said orthosis having a first surface being contoured for support of the foot, having a second surface being downwardly faced for contact with the foot supporting surface of the shoe, and having a medial side and an outer lateral side on opposed sides of a central longitudinal midline of said orthosis;
  2. a forefoot portion of said first surface being arcuately shaped to be positionable underneath the metatarsal bones of the foot;
  3. a heel portion of said first surface being arcuately shaped to be positionable underneath the calcaneus bone of the foot;
  4. a medial longitudinal arch curve proximate said medial side of said orthosis, said medial longitudinal arch curve being shaped to be positionable underneath the arch of the foot, said medial longitudinal arch curve having an upper surface being curved upwardly along a crown portion, said medial side being disposed in a continuous arched curve along a length dimension of said medial side of said orthosis, said medial



1       2.       The arch support orthosis of Claim 1 wherein said means for tensioning  
2       including:

3               an anterior bracket being L-shaped, said anterior bracket having a distal  
4       portion being connected under said anterior slope proximal to said medial side, said  
5       anterior bracket having a proximal portion extended downwardly from said anterior  
6       slope;

7               a posterior bracket being L-shaped, said posterior bracket having a distal  
8       portion being connected under said posterior slope proximal to said medial side, said  
9       posterior bracket having a proximal portion extended downwardly from said posterior  
10      slope;

11               an anterior linkage aligned with said anterior bracket, said anterior linkage  
12       having a distal end pivotably connected with said proximal portion of said anterior  
13       bracket, said anterior linkage having a proximal end disposed underneath said crown  
14       portion of said medial longitudinal arch curve;

15               a posterior linkage aligned with said posterior bracket, said posterior linkage  
16       having a distal end pivotably connected with said proximal portion of said posterior  
17       bracket, said posterior linkage having a proximal end disposed underneath said crown  
18       portion of said medial longitudinal arch curve; and

19               said means for adjusting the neutral length between said distal end of said

20 anterior linkage and said distal end of said posterior linkage, said means for adjusting  
21 having opposed ends being disposed to accept therein respectively said proximal ends of  
22 said anterior linkage and said proximal linkage, said means for adjusting being  
23 manipulated by the user;

24 whereby said anterior linkage and said posterior linkage are retracted into  
25 respective opposed ends of said means for adjusting by manipulation of said means for  
26 adjusting, the length between said respective distal ends is shortened, each of said  
27 anterior and posterior linkages engage said each respective proximal portions of said  
28 anterior bracket and said posterior bracket, thereby each respective anterior and posterior  
29 brackets pivot respectively inwardly, thereby pulling said underside of said anterior slope  
30 and said posterior slope toward each other and increasing the tension along said medial  
31 longitudinal arch curve;

32 whereby when each of said anterior linkage and said posterior linkage is  
33 extended from said means for adjusting by manipulation of said means for adjusting, the  
34 length between said respective distal ends is lengthened, thereby each distal end extends  
35 against said respective proximal portions of said anterior bracket and said posterior  
36 bracket which pivot against the underside of said anterior slope and said posterior slope,  
37 thereby pushing said underside of said anterior slope and said posterior slope apart and  
38 reducing the tension of said medial longitudinal arch curve.

1       3.       The arch support orthosis of Claim 1 further comprising said anterior slope  
2       having an anterior base of a first thickness, said posterior slope having a posterior base of  
3       a second thickness, said crown of said medial slope having a third thickness along said  
4       upper surface of said medial longitudinal arch curve, whereby said anterior base and said  
5       posterior base providing rigidity for said medial longitudinal arch curve for repetitive  
6       adjusting of said means for tensioning without failure during use by heavily weighted  
7       users.

1       4.       The arch support orthosis of Claim 1 wherein said means for adjusting being  
2       repeatably manipulated by the user for repetitive extension and retraction of said anterior  
3       linkage and said posterior linkage.

1       5.       The arch support orthosis of Claim 1 wherein said means for adjusting  
2       including a rotatable adjusting means having a sleeve nut, a worm gear, or a turnbuckle.

1       6.       The arch support orthosis of Claim 1 wherein said means for tensioning  
2       including:

3                said anterior bracket having a distal portion being connected under said  
4       anterior slope proximal to said medial side, said anterior bracket having a proximal  
5       portion extended downwardly from said anterior slope;

6                   said posterior bracket having a distal portion being connected under said  
7                   posterior slope proximal to said medial side, said posterior bracket having a proximal  
8                   portion extended downwardly from said posterior slope;

9                   an anterior means for adjusting connectable at an anterior swivel joint to said  
10                  anterior bracket, and

11                  a posterior means for adjusting connectable at a posterior swivel joint to said  
12                  posterior bracket, said anterior adjusting means and said posterior adjusting means having  
13                  a length of cable connectable therebetween, said length of cable having at least one  
14                  swivel portion along said length of cable, each of said anterior means for adjusting and  
15                  said posterior means for adjusting being rotatably manipulated by the user to retract or  
16                  extend the length of cable between each respective means for adjusting;

17                  whereby when either of said anterior means for adjusting and said posterior  
18                  means for adjusting is rotatably manipulated, the length of cable is adjustable in length,  
19                  with resultant increase in tension and angles of said anterior slope and said posterior slope  
20                  when said length of cable is reduced in length, and with resultant decrease in tension and  
21                  angles of said anterior slope and said posterior slope when said length of cable is  
22                  increased in length between said anterior bracket and said posterior bracket connected  
23                  under said medial longitudinal arch curve.

1                  7.           The arch support orthosis of Claim 1 wherein said means for tensioning

2 including:

3                   said anterior bracket having a distal portion being connected under said  
4                   anterior slope proximal to said medial side, said anterior bracket having a proximal  
5                   portion extended downwardly from said anterior slope;

6                   said posterior bracket having a distal portion being connected under said  
7                   posterior slope proximal to said medial side, said posterior bracket having a proximal  
8                   portion extended downwardly from said posterior slope; and

9                   two straps of non-extendable web materials; each of said straps having a distal  
10                  end attached to said respective anterior bracket and posterior bracket, each of said straps  
11                  having a proximal end connectable together by a means for adjusting positioned under  
12                  said medial longitudinal arch curve.

1                   8.           The arch support orthosis of Claim 7 wherein said means for tensioning  
2                   further including said means for adjusting being manipulated by the user for adjustment  
3                   of the length between said anterior bracket and said posterior bracket.

1                   9.           The arch support orthosis of Claim 8 wherein said means for adjusting  
2                   including a worm gear, a buckle, or a clamp.

1 10. A foot support orthosis including an arch support brace having an arch curve  
2 being variably tensioned during use, the foot support orthosis being fittable underneath  
3 the foot and being sized and shaped to be removably placed proximal a foot supporting  
4 surface of a foot enclosure worn by a user, comprising:  
5 an orthosis being sized for support of the foot from underneath about the  
6 metatarsal bones of the foot, to underneath about the calcaneus bone of the foot, said  
7 orthosis having a first surface being contoured for support of the foot, having a second  
8 surface being downwardly faced for contact with the foot supporting surface of the shoe,  
9 and having a medial side and a lateral side on opposed sides of a central longitudinal  
10 midline of said orthosis;  
11 a forefoot portion of said first surface being arcuately shaped to be  
12 positionable underneath the metatarsal bones of the foot;  
13 a heel portion of said first surface being arcuately shaped to be positionable  
14 underneath the calcaneus bone of the foot;  
15 a medial longitudinal arch curve proximate said medial side of said orthosis,  
16 said medial longitudinal arch curve being shaped to be positionable underneath the arch  
17 of the foot, said medial longitudinal arch curve having an upper surface being curved  
18 upwardly along a crown portion, said medial longitudinal arch curve including:  
19 an anterior slope being inclined from said upper surface of said medial  
20 longitudinal arch curve toward said forefoot portion of said orthosis;

21                   a posterior slope being inclined from said upper surface of said medial  
22                   longitudinal arch curve toward said heel portion of said orthosis; and  
23                   a medial slope being inclined from said upper surface of said medial  
24                   longitudinal arch curve toward said lateral side of said orthosis; and  
25                   said anterior slope having an anterior base of a first thickness, said posterior  
26                   slope having a posterior base of a second thickness, said crown of said medial slope  
27                   having a third thickness along said upper surface of said medial longitudinal arch curve,  
28                   said medial side of said medial longitudinal arch curve being disposed in a continuous  
29                   arched curve along a length dimension of said medial side;  
30                   whereby said medial longitudinal arch curve having said anterior base,  
31                   said crown portion, and said posterior base being tensioned during each foot-strike by  
32                   force being transferred by the foot of the user from said heel portion and onto said medial  
33                   longitudinal arch curve of said orthosis, thereby increasing the tension along said medial  
34                   longitudinal arch curve without significantly decreasing the height of the arch curve, with  
35                   said crown portion of said medial longitudinal arch curve flexibly rebounded to an  
36                   unweighted position by force being transferred by the foot of the user from said medial  
37                   longitudinal arch curve and onto said forefoot portion of said orthosis during each foot-  
38                   strike by the user while wearing said orthosis.

1                   11.           The foot support orthosis of Claim 10 further comprising a means for

2 tensioning connectable underneath said arch curve, said means for tensioning including:

3 an anterior bracket being L-shaped, said anterior bracket having a distal  
4 portion being connected under said anterior slope proximal to said medial side, said  
5 anterior bracket having a proximal portion extended downwardly from said anterior  
6 slope;

7 a posterior bracket being L-shaped, said posterior bracket having a distal  
8 portion being connected under said posterior slope proximal to said medial side, said  
9 posterior bracket having a proximal portion extended downwardly from said posterior  
10 slope;

15 a posterior linkage aligned with said posterior bracket, said posterior linkage  
16 having a distal end pivotably connected with said proximal portion of said posterior  
17 bracket, said posterior linkage having a proximal end disposed underneath said crown  
18 portion of said medial longitudinal arch curve; and

19 a means for adjusting the neutral length between said distal end of said  
20 anterior linkage and said distal end of said posterior linkage, said means for adjusting  
21 having opposed ends being disposed to accept therein respectively said proximal ends of

22 said anterior linkage and said proximal linkage, said means for adjusting being  
23 manipulated by the user;  
24 whereby said anterior linkage and said posterior linkage are retracted into  
25 respective opposed ends of said means for adjusting, the length between said respective  
26 distal ends is shortened, each of said anterior and posterior linkages engage said each  
27 respective proximal portions of said anterior bracket and said posterior bracket, thereby  
28 each respective anterior and posterior brackets pivot respectively inwardly, thereby  
29 pulling said underside of said anterior slope and said posterior slope toward each other  
30 and increasing the tension along said medial longitudinal arch curve;  
31 whereby when each of said anterior linkage and said posterior linkage is  
32 extended from said means for tensioning by manipulation of said means for adjusting, the  
33 length between said respective distal ends is lengthened, thereby each distal end extends  
34 against said respective proximal portions of said anterior bracket and said posterior  
35 bracket which pivot against the underside of said anterior slope and said posterior slope,  
36 thereby pushing said underside of said anterior slope and said posterior slope apart and  
37 reducing the tension of said medial longitudinal arch curve.

1 12. The foot support orthosis of Claim 10 further comprising a means for  
2 tensioning connectable underneath said arch curve, said means for tensioning including:  
3 an anterior bracket connectable to said anterior base, said anterior bracket

4 having a distal portion being connected under said anterior base proximal to said medial  
5 side, said anterior bracket having a proximal portion extended toward said posterior base;  
6 a posterior bracket connectable to said posterior base, said posterior bracket  
7 having a distal portion being connected under said posterior base proximal to said medial  
8 side, said posterior bracket having a proximal portion extended toward said anterior base;  
9 an anterior linkage aligned with said anterior bracket, said anterior linkage  
10 having a distal end pivotably connected with said proximal portion of said anterior  
11 bracket, said anterior linkage having a proximal end disposed underneath said crown  
12 portion of said medial longitudinal arch curve;  
13 a posterior linkage aligned with said posterior bracket, said posterior linkage  
14 having a distal end pivotably connected with said proximal portion of said posterior  
15 bracket, said posterior linkage having a proximal end disposed underneath said crown  
16 portion of said medial longitudinal arch curve; and  
17 a means for adjusting the neutral length between said distal end of said  
18 anterior linkage and said distal end of said posterior linkage, said means for adjusting  
19 having opposed rod ends being disposed to connect in an anterior swiveling connection to  
20 said proximal end of said anterior linkage and in a posterior swiveling connection to said  
21 proximal end of said proximal linkage, said means for adjusting being manipulated by the  
22 user to retract or extend each of said opposed rod ends;  
23 whereby when said opposed rod ends are retracted into respective opposed

24 ends of said means for adjusting, the length is shortened between said respective distal  
25 ends of said anterior and posterior linkages, each of said anterior and posterior linkages  
26 engage said respective proximal portions of said anterior and posterior brackets, thereby  
27 each respective anterior and posterior brackets retract respectively toward said means for  
28 adjusting, thereby pulling said underside of said anterior base and said posterior base  
29 toward each other and increasing the tension along said medial longitudinal arch curve;  
30 whereby when said opposed rod ends are extended into respective opposed  
31 ends of said means for adjusting, the length is lengthened between said respective distal  
32 ends of said anterior and posterior linkages, each of said anterior and posterior linkages  
33 engage said respective proximal portions of said anterior and posterior brackets, thereby  
34 each respective anterior and posterior brackets retract respectively away from said means  
35 for adjusting, thereby pushing said underside of said anterior base and said posterior base  
36 away from each other and reducing the tension of said medial longitudinal arch curve.

1 13. A foot support orthosis including an arch curve being variably tensioned  
2 during use, the foot support orthosis being fittable underneath the foot and being sized  
3 and shaped to be removably placed proximal a foot supporting surface of a foot enclosure  
4 worn by a user, comprising:  
5 an orthosis being sized for support of the foot from underneath about the  
6 metatarsal bones of the foot, to underneath about the calcaneus bone of the foot, said

7 orthosis having a first surface being contoured for support of the foot, having a second  
8 surface being downwardly faced for contact with the foot supporting surface of the shoe,  
9 and having a medial side and an outer lateral side on opposed sides of a central  
10 lengthwise midline of said orthosis;

11 a forefoot portion of said first surface of said orthosis being arcuately  
12 shaped to be positionable underneath the metatarsal bones of the foot;

13 a heel portion of said first surface of said orthosis being arcuately shaped  
14 to be positionable underneath the calcaneus bone of the foot;

15 a medial longitudinal arch curve having an upper surface being curved  
16 upwardly along a crown portion, said medial longitudinal arch curve including:

17 an anterior slope being inclined from said upper surface of said  
18 medial longitudinal arch curve toward said forefoot portion of said  
19 orthosis;

20 a posterior slope being inclined from said upper surface of said  
21 medial longitudinal arch curve toward said heel portion of said  
22 orthosis; and

23 a medial slope being inclined from said crown portion of said  
24 upper surface of said medial longitudinal arch curve toward said  
25 lateral side of said orthosis; and

26 said anterior slope having an anterior base of a first thickness, said posterior

27 slope having a posterior base of a second thickness, said crown of said medial slope  
28 having a third thickness along said upper surface of said medial longitudinal arch curve,  
29 said medial side of said medial longitudinal arch curve being disposed in an arched curve  
30 along a length dimension of said medial side;

31 whereby said medial longitudinal arch curve having said anterior base, said  
32 crown portion, and said posterior base being tensioned during each foot-strike by force  
33 being transferred by the foot of the user from said heel portion and onto said medial  
34 longitudinal arch curve of said orthosis, thereby increasing the tension along said medial  
35 longitudinal arch curve without significantly decreasing the height of the arch curve, with  
36 said crown portion of said medial longitudinal arch curve flexibly rebounded to an  
37 unweighted position by force being transferred by the foot of the user from said medial  
38 longitudinal arch curve and onto said forefoot portion of said orthosis during each foot-  
39 strike by the user while wearing said orthosis; and

40 a means for tensioning said medial longitudinal arch curve connectable  
41 between an underside portion of said anterior slope and an underside portion of said  
42 posterior slope, said means for tensioning having a means for adjusting being  
43 manipulated by a user for adjustment of a length of said means for tensioning between a  
44 neutral length, a decreased length, and an extended length between said anterior slope and  
45 said posterior slope,

46 whereby when the neutral length of said means for tensioning is reduced to the

47 decreased length by the user adjustment of said means for adjusting, the tension along  
48 said medial longitudinal arch curve is increased thereby the stiffness of said arch curve  
49 increases from when said means for tensioning is at the neutral length, and each slope of  
50 said anterior slope and said posterior slope is increased, and when the neutral length of  
51 said means for tensioning is increased to the extended length by the user adjustment of  
52 said means for adjusting, the tension along said medial longitudinal arch curve is  
53 decreased, and each slope of said anterior slope and said posterior slope is decreased.

1 14. The foot support orthosis of Claim 13 wherein said first thickness of said  
2 anterior base of said anterior slope is substantially equal to said second thickness of said  
3 posterior base of said posterior slope, said third thickness of said medial slope and said  
4 crown being less than the first and second thickness.

1 15. The foot support orthosis of Claim 13 wherein said first thickness of said  
2 anterior base of said anterior slope is less than said second thickness of said posterior  
3 base of said posterior slope, and said third thickness of said medial slope and said crown  
4 being less than the first and second thickness.

1 16. The foot support orthosis of Claim 13 wherein said means for tensioning  
2 including:

3                   an anterior bracket being L-shaped, said anterior bracket having a distal  
4                   portion being connected under said anterior slope proximal to said medial side, said  
5                   anterior bracket having a proximal portion extended downwardly from said anterior  
6                   slope;

7                   a posterior bracket being L-shaped, said posterior bracket having a distal  
8                   portion being connected under said posterior slope proximal to said medial side, said  
9                   posterior bracket having a proximal portion extended downwardly from said posterior  
10                  slope;

11                  an anterior linkage aligned with said anterior bracket, said anterior linkage  
12                  having a distal end pivotably connected with said proximal portion of said anterior  
13                  bracket, said anterior linkage having a proximal end disposed underneath said crown  
14                  portion of said medial longitudinal arch curve;

15                  a posterior linkage aligned with said posterior bracket, said posterior linkage  
16                  having a distal end pivotably connected with said proximal portion of said posterior  
17                  bracket, said posterior linkage having a proximal end disposed underneath said crown  
18                  portion of said medial longitudinal arch curve; and

19                  said means for adjusting the neutral length between said distal end of said  
20                  anterior linkage and said distal end of said posterior linkage, said means for adjusting  
21                  having opposed ends being disposed to accept therein respectively said proximal ends of  
22                  said anterior linkage and said proximal linkage, said means for adjusting being

23 manipulated by the user;  
24 whereby said anterior linkage and said posterior linkage are retracted into  
25 respective opposed ends of said means for adjusting, the length between said respective  
26 distal ends is shortened, each of said anterior and posterior linkages engage said each  
27 respective proximal portions of said anterior bracket and said posterior bracket, thereby  
28 each respective anterior and posterior brackets pivot respectively inwardly, thereby  
29 pulling said underside of said anterior slope and said posterior slope toward each other  
30 and increasing the tension along said medial longitudinal arch curve; and

31 whereby when each of said anterior linkage and said posterior linkage is  
32 extended from said means for tensioning by manipulation of said means for adjusting, the  
33 length between said respective distal ends is lengthened, thereby each distal end extends  
34 against said respective proximal portions of said anterior bracket and said posterior  
35 bracket which pivot against the underside of said anterior slope and said posterior slope,  
36 thereby pushing said underside of said anterior slope and said posterior slope apart and  
37 reducing the tension of said medial longitudinal arch curve.

1 17. The foot support orthosis of Claim 13 wherein said means for tensioning  
2 including:  
3 an anterior bracket connectable to said anterior base, said anterior bracket  
4 having a distal portion being connected under said anterior base proximal to said medial

5 side, said anterior bracket having a proximal portion extended toward said posterior base;  
6 a posterior bracket connectable to said posterior base, said posterior bracket  
7 having a distal portion being connected under said posterior base proximal to said medial  
8 side, said posterior bracket having a proximal portion extended toward said anterior base;  
9 an anterior linkage aligned with said anterior bracket, said anterior linkage  
10 having a distal end pivotably connected with said proximal portion of said anterior  
11 bracket, said anterior linkage having a proximal end disposed underneath said crown  
12 portion of said medial longitudinal arch curve;  
13 a posterior linkage aligned with said posterior bracket, said posterior linkage  
14 having a distal end pivotably connected with said proximal portion of said posterior  
15 bracket, said posterior linkage having a proximal end disposed underneath said crown  
16 portion of said medial longitudinal arch curve; and  
17 said means for adjusting the neutral length between said distal end of said  
18 anterior linkage and said distal end of said posterior linkage, said means for adjusting  
19 having opposed rod ends being disposed to connect in an anterior swiveling connection to  
20 said proximal end of said anterior linkage and in a posterior swiveling connection to said  
21 proximal end of said proximal linkage, said means for adjusting being manipulated by the  
22 user to retract or extend each of said opposed rod ends;  
23 whereby when said opposed rod ends are retracted into respective opposed  
24 ends of said means for adjusting, the length is shortened between said respective distal

25 ends of said anterior and posterior linkages, each of said anterior and posterior linkages  
26 engage said respective proximal portions of said anterior and posterior brackets, thereby  
27 each respective anterior and posterior brackets retract respectively toward said means for  
28 adjusting, thereby pulling said underside of said anterior base and said posterior base  
29 toward each other and increasing the tension along said medial longitudinal arch curve;  
30 whereby when said opposed rod ends are extended into respective opposed  
31 ends of said means for adjusting, the length is lengthened between said respective distal  
32 ends of said anterior and posterior linkages, each of said anterior and posterior linkages  
33 engage said respective proximal portions of said anterior and posterior brackets, thereby  
34 each respective anterior and posterior brackets retract respectively away from said means  
35 for adjusting, thereby pushing said underside of said anterior base and said posterior base  
36 away from each other and reducing the tension of said medial longitudinal arch curve.

1 18. A method of supporting an arch curve of a foot of a user for treating  
2 inflammation in the user's foot, the inflammation proximate the arch curve of the foot and  
3 related to heel spurs, plantar fasciitis, arch pain, tendinitis, and/or metatarsalgia in the  
4 foot, each foot of the user being supported by a supporting surface within respective foot  
5 support enclosures, comprising the steps of:

6 providing an arch support orthosis including an adjustable medial longitudinal  
7 arch curve being adjustable in slope and tension along said arch curve, said arch support

8 orthosis being sized and shaped for removably fitting underneath the arch curve of the  
9 user's foot;

10 adjusting a tensioning means having a means for adjusting connected to an  
11 underside of an anterior slope and a posterior slope of said medial longitudinal arch  
12 curve, said adjusting step providing a first tension along said medial longitudinal arch  
13 curve;

14 inserting said arch support orthosis underneath the foot of the user and upon  
15 the supporting surface of the foot support enclosure;

16 bearing force from the foot of the user onto said medial longitudinal arch  
17 curve of said arch support orthosis during each foot-strike by the foot of the user;

18 tensioning said medial longitudinal arch curve during each foot-strike, said  
19 tensioning means limiting said medial longitudinal arch curve from being compressed in  
20 height thereby supporting the arch curve of the user's foot during each foot-strike;

21 readjusting said means for adjusting to a second tension thereby reducing  
22 tension along said adjustable medial longitudinal arch curve, whereby the user's arch  
23 curve is continuously supported by said adjustable medial longitudinal arch curve; and

24 selecting a preferred angle of the anterior slope and a preferred angle of the  
25 posterior slope, and maintaining the tension along the medial longitudinal arch curve by  
26 shortening or lengthening the length of the tensioning means by manipulating said means  
27 for adjusting.

1       19.       The method of supporting of Claim 18, further comprising the steps of:  
2                   readjusting at periodic time increments the angle of the anterior slope, the  
3                   angle of the posterior slope, and the height of the medial longitudinal arch curve by  
4                   shortening or lengthening the length of the tensioning means by user manipulating of the  
5                   tensioning means;  
6                   removing and re-inserting said arch brace in the shoe, boot, or sandal of the  
7                   preference of the user; and  
8                   providing user adjustable height support, user adjustable angle of the anterior  
9                   slope, and user adjustable angle of the posterior slope when said removing and re-  
10                  inserting step is repeated;  
11                  whereby said adjusting step and said readjusting steps reduce the inflammation  
12                  in the foot and strengthen the arch curve of the foot of the user, and said removing and re-  
13                  inserting steps provide adjustable tension of the arch curve, anterior slope support, and  
14                  posterior slope support for the arch curve of the foot of the user for each shoe enclosure  
15                  worn by preference of the user.